TRUSHKIN, A.YA.

DUKHANIN, Ye.I., Geroy Sotsialisticheskogo Truda, laureat Stalinskoy premii; TRUSHKIN, A.Ya., otvetstvennyy redaktor; VILIN, A.M., redaktor; KUDRYAVTSEVA, I.G., tekhnicheskiy redaktor

[A quarter century at the coal cutter] Chetvert' veka u vrubovoi mashiny. 2-e dop. izd. Moskva, Ugletekhizdat, 1951. 185 p. [Microfilm] (MLRA 7:10)

1. Deputat Verkhovnogo Soveta SSSR (for Dukhanin) (Dukhanin, E.I.) (Coal mines and mining)

TRUSHKIN, I., podpolkovnik

Use of engineering equipment. Voen.vest. 39 no.2:90-91 F '60.
(MIRA 14:2)

(Military engineering)

TRUSHKIN, P.G.

Tectonic structural characteristics and the history of the formation of the Pokrovka upland. Geol. nefti i gaza no.3:40-48 Mr '57.
(Kuybyshev Province--Geology, Structural) (MLRA 10:8)

TRUSHKIN, P. G., Cand Master Geolog-Mineralog Sci—(diss) "The tectonic structure and oil-bearing capacity of the Paleozoic sedimentation the south Kuibyshev area of the Trans-Volga region." Kuibyshev, 1957, 23 pp, (Moscow State University im. M.V. Lomonosova), 115 copies. (KL, No 40, 1957, p.91)

TRUSHKIN, P.G.

Tectonic structure of the southern part of the trans-Volga portion in Kuybyshev Province. Sov.geol. 2 no.4:93-108 Ap '59. (MIRA 12:7)

1. Kuybyshevskiy nauchno-issledovatel'skiy neftyanoy institut.
(Volga Valley--Geology, Structural)

LEVIN, L.E.; KORELOV, S.K.; TRUSHKIN, P.G.; CHERNYSHEVA, Z.S.

Relation of the basic structural elements in the central trans-Volga region to the Pre-Pliocene relief and the structural features of the Pliocene-Quaternary sediments. [Trudy] NIIneftegaza no.10:50-60 '63. (MIRA 18:3)

1. Nauchno-issledovatel'skaya laboratoriya geologicheskikh kriteriyev otsenki perspektiv neftegazonosnosti; Institut geografii AN SSSR i Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti.

TRUSHKIN, P.G.

Structural relation of the Mesozoic to the Paleozoic in the southeastern part of Kuybyshev Province in the trans-Volga region. Geol. nefti i 2 no.12:29-35 D '58. (MIRA 12:2)
(Kuybyshev Province--Geology, Structural)

ANDREYEV, V.N.; VAYNBAUM, S.Ya.; POLYAKOV, V.A.; SAMAROV, S.V.; TRUSHKIN, P.G.; KHAYKIN, L.G.

Structure of the eastern sector of the Zhiguli swell in connection with oil prospects. Geol. nefti i gaza 7 no.12: 6-11 D '63. (MIRA 17:8)

1. Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti.

TRUSHKIN, V., inzh.

Electrostatic painter. Tekh. mol. 26 no.12:4 '58. (MIRA 11:12)
(Painting, Industrial)

TRUSHKIN, V.

Universla adapters. Radio no.9:45 S '62. (MIRA 15:9)
(Magnetic recorders and recording--Equipment and supplies)

TRUSHKIN, V.

Improving an alarm clock. IUn. tekh. 4 no.9:69 S '59.
(MIRA 12:12)

(Clocks and watches)

15.7000

~~25(1)~~

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SOV/29-59-12-2/23

AUTHOR: Trushkin, V., Engineer

TITLE: Quick and Safe

PERIODICAL: Tekhnika molodezhi, 1959, Nr 12, p 4 (USSR)

ABSTRACT: This is a short information on a new method of drying paints by infrared rays. A metal surface heated to 400° proved to be the best emitter. Infrared rays heat the product itself; thus, the drying of the coat of paint is not caused from outside but from the lower layer, adjacent to the surface of the work piece. The surface of the film is not loosened in this process, but becomes more dense (Figs). This method is highly valuable in electro-painting. Such a drying device, built after the plans of the Nauchno-issledovatel'skiy institut tekhnologii avtomobil'noy promyshlennosti (Scientific Research Institute of the Technology of Automobile Industry) is successfully used in the Moscow works "ATE-1", the Gor'kovskiy avtozavod (Gor'kiy Automobile Works) and in other firms together with an electropaint chamber. In the Gor'kiy Automobile Works the drying time of bicycle parts could be reduced from one hour to seven minutes. The quality of paint has improved and the consumption of electricity was reduced. There are 2 figures.

Card 1/1

25(7), 15(7)

AUTHOR: Trushkin, V., Engineer

TITLE: The Electrostatic Painter (Elektrostaticheskiy malyar)

PERIODICAL: Tekhnika molodezhi, 1958, Nr 12, pp 4-4 (USSR)

ABSTRACT: In this article, the author reports on a new method to be applied for the painting of machine parts. Here the painting of products is done in the electric field. The method made it possible to improve the quality of the paint as well as the working conditions, and to attain a saving of coloring substance not only of 25 but even of 80%. When the electric method was started, pneumatic atomizers were used. But the loss of paint was still too great. At present, these pneumopistols have been replaced by centrifugal atomizers in the form of bowls, mushrooms, and disks of special construction. An electric painting plant is illustrated on a colored insert sheet. The workpieces to be painted are introduced - suspended from a conveyer (1) - into a small chamber with glass walls. Here, rocker pieces (10) with color sprayers (6) bow before them. They touch the workpieces with invisible lines of force. Color particles get loose from the edges of the rotating bowls and

fall evenly on the workpieces. At first, workpieces of special forms had to be repainted in addition by hand as the lines of force did not reach all recesses in the profile of the workpiece. This year, coworkers of the Nauchno-issledovatel'skiy institut avtomobil'noy promyshlennosti (Scientific Research Institute of Automobile Industry) have found a new method, making the color bowls adapt themselves to the workpieces, moving them closer to the products and reducing the voltage to 60-70 kV. This caused the lines of force to become more flexible and to penetrate deeper recesses too. Change-over from manual to electric spraying yielded to the works a yearly saving of 250 000 roubles and 40% of color in the painting of wheels for "Moskvich". In 1957, 130 000 roubles and 60% of color were saved by one single painting chamber in the bicycle factory at L'vov. It must be stressed that investments for the erection of the whole plant amount to about 30 000 roubles, i.e. one-sixth of the average yearly saving. This means that the plant will be amortized after 2 months of work already. Products of wood and nonconducting material can also be painted in the electric field. In this case, a metal background is placed behind the workpieces. By this method, not only colors

but oils and powders for preserving purposes can be atomized, too. Also the enameling can be done by means of this method. There are 4 figures.

SOV/145-59-3-5/21

12(1,2)

AUTHOR: Trushkin, V.N., Assistant

TITLE: The Calculation of the Natural Frequency of Torsional Oscillations With Accounting of the Side Play in Gear Transmissions

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Mashinostroyeniye, 1959, Nr 3, pp 37-46 (USSR)

ABSTRACT: The author shows a solution of the problem of the natural oscillations of a two-mass system with side play, obtained by the method of direct linearization. The method produces a solution in a simple form with sufficient accuracy for practical purposes. The other methods of dynamic calculations of automotive transmissions are based on the assumption of the linearity of the system, while actual constructions have many nonlinear members. The influence of these members may be neglected if they are small. However, there will be cases when such simplifactions will lead to considerable errors and cause eventually equipment failures. The author mentions in this connection S.V. Forsten [Ref 1] who observed a 10% deviation of the natural frequency of

SOV/145-59-3-5/21

The Calculation of the Natural Frequency of Torsional Oscillations With Accounting of the Side Play in Gear Transmissions

torsional oscillations on a tank transmission. There are 2 diagrams, 6 graphs and 4 references, of which 2 are Soviet, 1 German and 1 English.

ASSOCIATION: MVTU imeni Baumana (MVTU imeni Bauman)

Card 2/2

TRUSHKIN, V.P.; STAKHURSKIY, A.Ye., red.; NOVOSEL'TSEVA, O.N., otv. red. SHCHEPTEVA, T.N., tekhn. red.

[Model vending machines] Modeli-avtomaty. Moskva, Izd-vo "Detskii mir." (Prilozhenie k zhurnalu "IUnyi tekhnik," no.16(106)) No.3. 1961. 1 fold. l. (MIRA 14:8)

1. TSentral'naya stantsiya yunykh tekhnikov, Moscow.
(Vending machines—Models)

TRUSHKIN, Vasiliy Polikarpovich; CHERNOV, Ye., red.; KUZNETSOVA, A., ~~tekhn. red.~~

[Painting of articles in an electric field]Okraska izdelii v elektricheskom pole. Moskva, Mosk. rabochii, 1962. 47 p. (MIRA 15:8)

(Spray painting, Electrostatic)

YEVSEYEVA, A., TRUSHKINA, A., VAS'KINA, P., MIKHEYEVA, T.

Here's what collective farm women of Ryazan Province say. (MIRA 11:10)
Zdrav.Ros. Fed. 2 no.10:18-19 O '58

1. Kolkhoz "Den' 9 yanvarya" Karablinskogo rayona (for Yevseyeva). 2. Kolkhoz imeni V.I. Lenina (for Trushkina). 3. Kolkhoz "Krasnoye znamya" Spasskogo rayona (for Vas'kina). 4. Kolkhoz "Progress" Sasovskogo rayona (for Mikheyeva).
(RYAZAN PROVINCE--DAY NURSERIES)

LEONT'YEVA, YU.A., dotsent; GERASIMOV, B.S., dotsent; TRUSHKINA, L.R., aspirant; SOBOLEVA, Ye.M., kand. sel'skokhoz. nauk; SHARIPOV, B.S., nauchnyy sotrudnik (Tashkent); SAF'YANOV, S.P., aspirant; KRALL, E.L., kand. biolog. nauk; YULDASHEVA, Kh.Yu., mladshiy nauchnyy sotrudnik; KUZNETSOVA, P.A., agronom (Kostroma); ZHALNINA, L.S., mladshiy nauchnyy sotrudnik; SENCHENKO, M.G., mladshiy nauchnyy sotrudnik; SINITSYNA, A.A., nauchnyy sotrudnik; GOLUBKIN, V.G., starshiy nauchnyy sotrudnik; BOGOVIK, I.V., kand. biolog. nauk (L'vov).

Brief news. Zashch. rast. ot vred. i bol. 9 no.10:52-56 '64 (MIRA 18:1)

1. Kafedra zashchity rasteniy Kuybyshevskogo sel'skokhozyaystvennogo instituta (for Leont'yeva, Gerasimov). 2. Samarkandskiy universitet (for Trushkina). 3. Kazakhskiy institut zashchity rasteniy (for Saf'yanov). 4. Institut zoologii i botaniki AN Estonskoy SSR, Tartu (for Krall'). 5. Sredneaziatskiy institut zashchity rasteniy (for Yuldasheva). 6. Institut lubyanykh kul'tur (for Zhalnina, Senchenko). 7. Institut sadovodstva nechernozemnoy polosy (for Sinitsyna). 8. Novosibirskaya sel'skokhozyaystvennaya opytnaya stantsiya (for Golubkin).

TRUSHKINA, N. I.

"An Index of Insecticides, Fungicides, and Fertilizers" (Opredelitel' Insektitsidov, Fungisidov, i Udobreniy), P. V. Popov and N. I. Trushkina, Goskhimizdat, Moscow/Leningrad, 1949, 104 pages, 3 rubles 50 kopeks.

With the aid of this index, about 85 different types of insecticides, fungicides, and fertilizers can be determined without chemical analysis.

SO: Uspekhi Khimii, Vol 18, #6, 1949; Vol 19, #1, 1950 (W-10083)

POPOV, P.V.; TRUSHKINA, N.I.

[Guide to chemical poisons and mineral fertilizers] Opredelitel' iadokhimikatov i mineral'nykh udobrenii. Moskva, Gos. nauchno-tekhn. izd-vo khim. lit-ry, 1955. 119 p. (MLRA 9:10)
(Chemicals) (Fertilizers and manures)

TRUSHKINA, N. I.

✓ Arsenic containing compounds of copper and zinc [illegible] III in 10% NH_4OH, 5.67, 5.03, [illegible] III in 5% NH_4OH [illegible]

[illegible] III [illegible] 5.5, 4.99, $As_2O_5.3.82CuO.0.25NH_3.2.3H_2O$, III in NH_4OH, 7.4, 6.7, $As_2O_5.3.5CuO.0.25NH_3.2.3H_2O$, III in 5% NH_4OH, 3.79, 2.88, $As_2O_5.4.55CuO.1.5NH_3.4.7H_2O$. At 70°: VII in 10% NH_4OH, 3.72, 0.73, $As_2O_5.3.15ZnO.4.2NH_3$; VII in 5% NH_4OH, 1.0, 0.5, $As_2O_5.2.84ZnO.3NH_3.1.2H_2O$; IV in 10% NH_4OH, 8.55, 2.06, $As_2O_5.4.1CuO.0.76NH_3.4H_2O$; IV in 5% NH_4OH, 5.5, 1.94, $As_2O_5.3.4CuO.$-

(3)

KUPERMAN, M.Ye.; ORLOV, V.I.; KRUTITSKAYA, M.N.; TRUSHKINA, N.I.

Aqueous suspensions of powder and paste-type DDT and hexachlorocyclohexane compounds used for spraying. [Trudy] MIUIF no.156: 187-199 '55. (MLRA 9:10)

(DDT (Insecticide)) (Benzene hexachloride)

Trushkina, N.I.

USSR/Inorganic Chemistry - Complex Compounds. C.

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 30284

Author : Kuperman, M.Ye., Orlov, V.I., Krutitskaya, S.N., Trushkina, N.I.

Inst :

Title : Investigations of Arsenous Compounds of Copper and Zinc.

Orig Pub : Sb. Issledovaniya po prikladnoy khimii, M.-L., Izd-vo AN SSSR, 1955, 236-243

Abst : Under laboratory conditions were prepared $Cu_3(AsO_3)_2 \cdot Cu(OH)_2$, $Cu(AsO_2)_2$, $Cu_3(AsO_4)_2 \cdot Cu(OH)_2$, $Cu_3(AsO_4)_2$, $Zn_3(AsO_3)_2$, $Zn(AsO_2)_2$, $Zn_3(AsO_4)_2$ and $Zn_3(AsO_4)_2 \cdot Zn(OH)_2$. A determination was made of the amounts of As_2O_5 or As_2O_3 and CuO or ZnO, dissolved in solutions of NH_3 and CH_3COOH at 25 and 70°.

Card 1/1

TRUSHKINA, N.I.

KUPERMAN, M.Ye.; ORLOV, V.I.; KRUTITSKAYA, M.N.; TRUSHKINA, N.I.

Aqueous suspensions of 15% and 20% DDT compounds used for spraying. [Trudy] NIUIF no.156:199-201 '55. (MLRA 9:10)

(DDT (Insecticide))

MOROZOVA, M.A.; KOL'TSOV, N.S.; TRUSHKINA, N.I.; ZUBOV, M.F.; GOLYSHIN, N.M.

Copper-containing fungicides for green plants. [Trudy] NIUIF no.164:38-40 '59. (MIRA 15:5)
(Fungicides) (Copper compounds)

MOROZOVA, M.A., KOL'TSOV, N.S., TRUSHKINA, N.I., LAZAREVA, Ye.Ya.

Method of producing a copper subsulfate preparation. [Trudy] NIUIF no.167:151-155 '60. (MIRA 13:8)
(Copper sulfate) (Fungicides)

TRUSHKO INZH.

"K voprosu o topkakh dlya peregonnykh ustanovok volzhskogo rayona," p. 21

Goryuchiye Slantsy, No. 1, 1932

BOLGOV, A.T.; TRUSHKO, K.A.

Universal load device for testing connecting rods. Zav.lab. 28 no.7:874-875 '62 (MIRA 15:6)

1. Altayskiy politekhnicheskiy institut.
(Testing machines)

DERTEV, N.K.; BORISOV, A.F.; ZADUMIN, V.I.; TRUSHKOV, A.I.

E.M.F. method of studying the effect of the heat treatment of glass during a precrystallization period on the nature of crystallization. Izv. AN SSSR. Neorg. mat. 1 no.6: 957-962 Je '65. (MIRA 18:8)

1. Gor'kovskiy politekhnicheskiy institut imeni A.A. Zhdanova i Saratovskiy filial Gosudarstvennogo instituta stekla.

KARASEV, M.F., doktor tekhn.nauk, prof.; FALEYEV, V.A., kand.tekhn.nauk, dotsent; TRUSHKOV, A.M., kand.tekhn.nauk, dotsent; KOZLOV, V.N., inzh.; MEDLIN, R.Ya., inzh.; LEBEDEV, N.A., inzh.; CHIKUNOV, O.V., inzh.

Testing of the new electric brushes on d.c. locomotives. Trudy OMIIT 40:3-41 '63. (MIRA 18:8)

TRUSHKOV, A.M., kand.tekhn.nauk

Application of the mathematical statistics method in testing the commutation of traction motors under operating conditions. Trudy OMIIT 40:61-78 '63.

Flashover of electric machinery brushes in idle running. Ibid.:141-148 (MIRA 18:8)

TRUSHKOV, A.M., kand.tekhn.nauk, dotsent; SOLONENKO, G.I., inzh.

Experimental study of the commutation of traction motors during the field weakening of the main poles. Trudy OMIIT 40:123-139 '63. (MIRA 18:8)

TRUSHKOV, Anatoliy Mikhaylovich, kand.tekhn.nauk, dotsent; SOLONENKO, Geliy Ivanovich, prepodavatel'

Commutation test of an electric locomotive with regulated characteristics. Izv.vys.ucheb.zav.; elektromekhanika 8 no.6:702-707 '65. (MIRA 18:8)

1. Kafedra elektricheskikh mashin Omskogo instituta inzhenerov zheleznodorozhnogo transporta (for Trushkov). 2. Kafedra podvizhnogo sostava Omskogo instituta inzhenerov zheleznodorozhnogo transporta (for Solonenko).

TRUSHKOV, Anatoliy Mikhaylovich, kand.tekhn.nauk, dotsent

Sparking at the brushes of electrical machines disconnected from the power network. Izv. vys. ucheb. zav.; elektromekh. 6 no.6: 781-782 '63. (MIRA 16:9)

1. Kafedra elektricheskikh mashin Tomskogo otdeleniya Omskogo instituta inzhenerov zheleznodorozhnogo transporta.
(Electric machinery)

KARASEV, M. F., doktor tekhn. nauk, prof.; KUCHUMOV, A. P., kand. tekhn.nauk, dotsent; TRUSHKOV, L. M., kand tekhn.nauk, dotsent; PARAMZIN, V. P., inzh.

Commutation of electric traction motors under actual operating conditions and methods for studying it. Trudy OMIIT 37:32-42 '62. (MIRA 17:5)

TRUSHKOVSKIY, A.A.

Drop in the productivity of the sand pastures of the Volga-Ural interfluve and possibilities to improve them. Izv. AN SSSR Ser.geog no.4:59-66 '64 (MIRA 17:8)

1. Institut geografii AN SSSR.

GAEL', A.G. [Gael', A.G.], egyetemi tanar; TRUSKOVSKIJ, A.A. [Trushkovskiy, A.A.], kutato

Genesis, age and evolution of soils formed on sand in the steppe region of the Soviet Union. Erdo 13 no.1:20-26 Ja'64.

1. Lomonosov Egyetem, Moszkva, Szovjetunio (for Gael')
2. Szovhetunio Tudomanyos Akademiajanak Foldrajztudomanyi Intezete, Moszkva, Szovjetunio. (for Trushkovskiy).

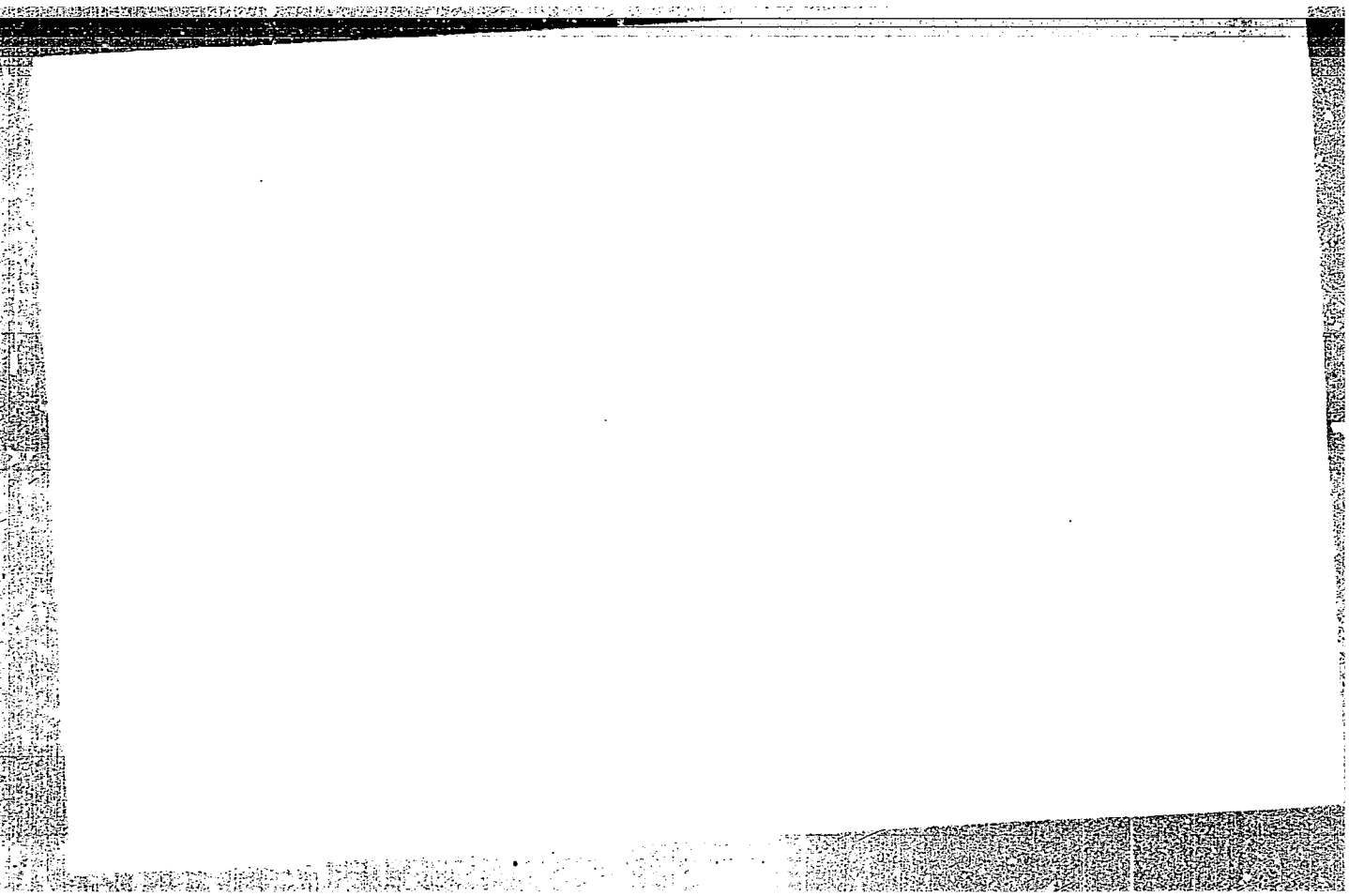
TRUSKOLYAVSKAYA, T.V.; DEMIDOVICH, D.; POVARENNYKH, L.S.

From technical periodicals. Standartizatsiia 24 no.11:51-54 N '60. (MIRA 13:11)

(Bibliography--Standardization)

PETROV, K.A.; NIFANT'YEV, E.Ye.; KHORKHOYANU, L.V.; TRUSHKOV, A.I.

Reesterification of esters of dialkyl- and diarylphosphinic acids. (MIRA 14:9)
Zhur.ob.khim. 31 no.9:3085-3090 S '61.
(Phosphinic acid) (Esterification)



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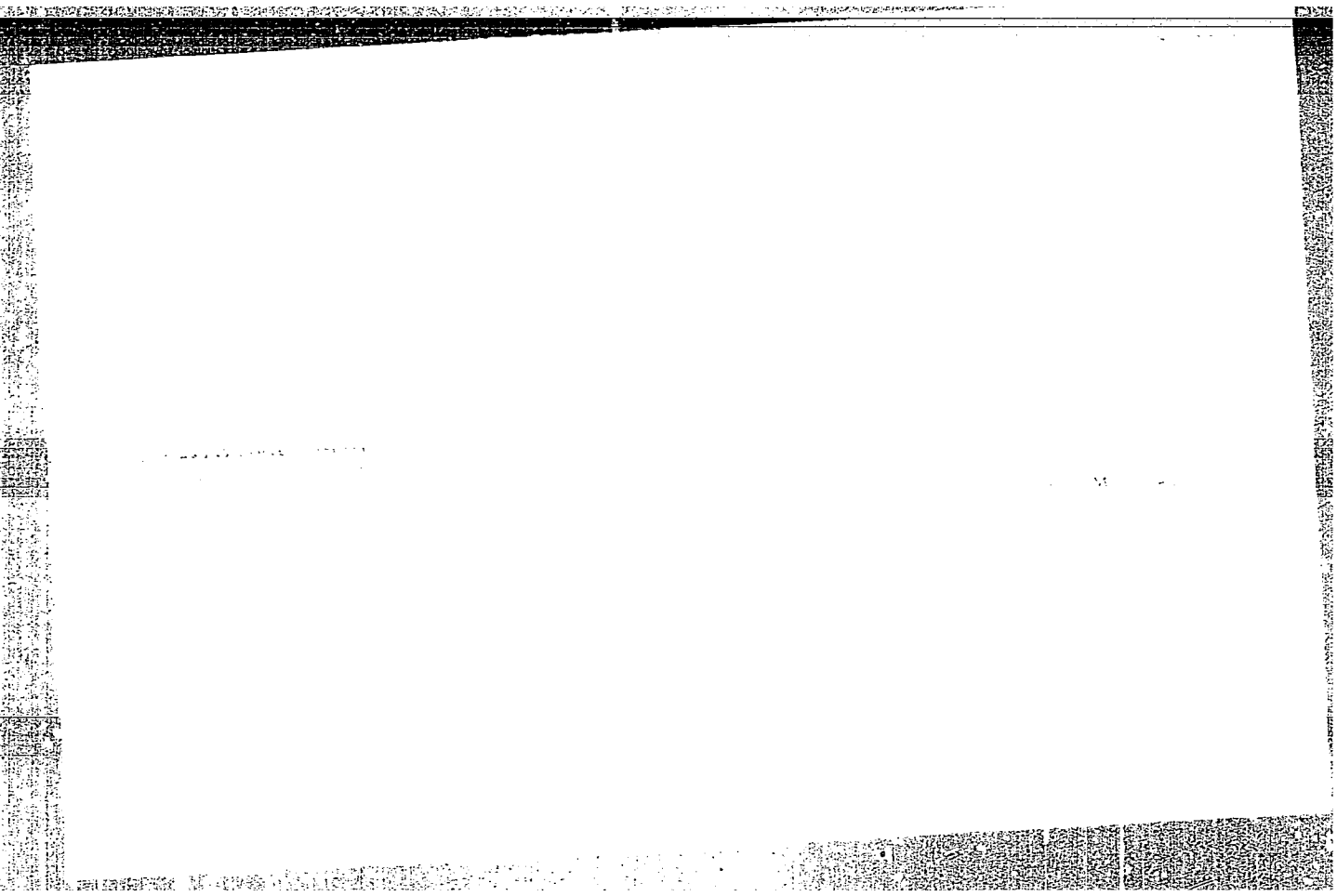

KARASEV, M.F., doktor tekhn.nauk, prof.; KOZLOV, V.N., inzh.; SEREGIN, V.A., inzh.; TRUSHKOV, A.M., kand.tekhn.nauk

Evaluation of the degree of sparking of the brushes of electric traction motors. Elektrotekhnika 36 no.6:7-8 Je '65. (MIRA 18:7)

SOV/110-59-4-6/23

AUTHOR: Trushkov, A.M. (Engineer)

TITLE: The Influence of Section Transposition on Commutation (Vliyaniye transpozitsii sektsiy na kommutatsiyu)

PERIODICAL: Vestnik Elektropromyshlennosti,1959,Nr 4,pp 23-25(USSR)

ABSTRACT: The reasons for transposing the conductors in the slots of large machines are explained and the manufacturing and other difficulties that result from the use of transposition are described. The experiments made by Academician K.I. Shenfer, some considerable time ago, to explain the effect of transposition on commutation when a damper bar is used in the slot were repeated; work of Cand.Tech.Sci. A.B. Ioffe was also done on this subject. Shenfer's damper consisted of a solid copper rod laid alongside the conductors and he found that in some cases this could reduce the reactive e.m.f. by 30 - 45%. Oscillograms of the voltage on the commutating section of a traction motor without a damper and with one are given in Figs 1a and 1b respectively, and it will be seen from these curves that the use of the damper reduces the peak by 30 - 40%. The damper operates by suppressing the magnetic field set up by eddy currents in the main conductors. When such dampers are used sub-division of

Card 1/3

The Influence of Section Transposition on Commutation

the solid conductors and also transposition may have a detrimental effect on the commutation. A number of tests were made to study this problem. Three similar sections were made and installed in the armature of a traction motor; they differed only in that in one the conductor was sub-divided and insulated, in another transposition was used and the third was solid. All three sections were connected to a changeover switch to a special installation with stationary commutator that could be used to reproduce the commutation process. Current values at which sparking occurred in the three types of conductor are given in Table 1. Typical e.m.f. and current curves of the commutating sections for a given value of load current are given in Fig 2. Comparative heights of e.m.f. peaks for the different sections are given in Table 2. It will be seen that the solid winding operates at the highest load before sparking occurs, the transposed winding at the lowest load, whilst the other winding is intermediate. This is because the solid conductor itself acts as a damper winding. Commutation was improved by replacing the wooden or plastic wedge slots by aluminum ones which

The Influence of Section Transposition on Commutation

operated as dampers to reduce the reactive e.m.f. of the commutating sections. E.m.f. curves for the transposed section with wooden and aluminum wedges respectively are given in Figs 3a and 3b. Table 3 gives current values at which sparking starts for sections with wooden and aluminum wedges. It will be seen that the aluminum wedges have a beneficial effect. It is concluded that although a transposition of the section conductors reduces the losses it impairs commutation and when a section of a traction motor armature is transposed sparking occurs at a current 13 - 16% less than when solid conductors are used. The use of aluminum wedges is recommended.

Card 3/3 There are 3 figures, 3 tables and 3 Soviet references.

SUBMITTED: May 12, 1958

TRUSHKOV, Anatoliy Mikhaylovich, kand.tekhn.nauk

Sparking of the traction motors of d.c. locomotives. Izv. vys. uch. zav.; elektromekh. 5 no.8:944-952 '62. (MIRA 15:8)

1. Kafedra elektricheskikh mashin Tomskogo elektromekhanicheskogo instituta inzhenerov zheleznodorozhnogo transporta.
(Electric locomotives) (Electric railway motors)

TRUSHKOV, A.M., kand.tekhn.nauk

Evaluation of commutational reliability of electrical machines.
Vest. elektroprom. 34 no.5:37-38 My '63. (MIRA 16:5)
(Electric machinery) (Commutation (Electricity))

TRUSHKOV, A.M., inzh.

Service of brushes in traction motors of diesel-electric locomotives. Vest.elektroprom. 29 no.12:25-30 D '58.(MIRA 11:12)
(Brushes, Electric)

110-58-6-14/22

AUTHOR: Trushkov, A.M., Engineer

TITLE: The Adjustment of Commutation on, and Selection of Brushes for, Traction Motors (Nastroyka kommutatsii i podbor shchetok tyagovykh elektrodvigateley)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Nr 6, pp 57 - 60 (USSR).

ABSTRACT: This article describes a new method of adjusting the interpoles of a d.c. motor, based on the use of a special photo-electric sparking indicator developed in the Tomsk Branch of the Scientific Research Institute of the Electro-technical Industry. Light energy from sparking, picked up by a photo-electric cell, is amplified, and the output fed to a meter and also to an oscillograph. The criterion taken to evaluate the intensity of sparking was the density of sparking per unit length of brush. The instrument was calibrated against a standard light-source: measurements were also made on a motor sparking at different degrees according to standard GOST-183-55, the intensity of sparking being related to the standard by experienced observers. The meter readings in terms of the standard degrees of sparking are shown in Table 1. The corresponding figures for mean linear density of sparking are given in Table 2 and Curve 1 of Figure 1, which approximates in shape

Card1/3

The Adjustment of Commutation on, and Selection of Brushes for, Traction Motors

to a parabola (Curve 2). Interpole adjustments were made on machines working back-to-back. Sparking was measured with the meter and spark-free zones were established and plotted, as shown in Figures 2, 3, 4 and 5. Meter and visual estimations of sparking are compared graphically in Figure 2; the condition of the interpoles at rated load may be judged from the position of the mean line. It will be seen that for the curve given in Figure 3, the interpoles should be strengthened by 1.7%.

The meter was also used to compare the commutating properties of different grades of brushes. They were assessed according to the width of the sparkless zone under given conditions and the mean sparking intensity during an hour's running. Oscillograms for the three grades of brush tested are shown in Figure 6, where the area under the curve corresponds approximately to the spark energy: one grade

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of brush was better than the others. In all cases, there was an initial increase in sparking followed by a partial decrease. There are 6 figures, 2 tables and 5 Soviet references.

ASSOCIATION: Tomskiy elektromekhanicheskiy institut inzhenerov zheleznodorozhnogo transporta (Tomsk Electro-mechanical Institute of Railway Transport Engineers)

SUBMITTED: February 11, 1958

Card 3/3 1. Commutators--Design 2. Electric motors (D.C.)--Equipment

TRUSHKOV, A.M., inzh. (Tomsk)

Studying the sparking of traction motors by means of photoelectric indicators. Elektrichestvo no.10:80-81 O '58. (MIRA 12:1)

(Electric locomotives) (Electric motors--Testing)

KARASEV, M.F.; KOZLOV, V.N.; KOZLOVSKIY, O.M.; LITVINOV, I.R.; TRUSHKOV, A.M.; FALEYEV, V.A.

Experimental study of the sparking of electric locomotive traction motors during operation. Izv. vys. ucheb. zav.; elektromekh. 4 no. 1:68-74 '61. (MIRA 14:4)
(Electric railway motors)

SOV/110-58-12-7/22

AUTHOR: Trushkov, A.M., Engineer

TITLE: The Behaviour of the Brushes in Traction Motors of Electric Locomotives (O rabote shchetok tyagovykh dvigateley elektrovozov)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Nr 12, pp 25-30 (USSR)

ABSTRACT: This article analyses the operation of brushes on locomotive traction motors at the Belovo depot of the Tomsk railway. Motion of the brushes relative to the commutator increases sparking and wear. The most important type of motion is radial oscillation with frequencies from a few cycles to 5,000 c/s. The low-frequency movement results from eccentricity of the commutator, from individual bars being too low or too high, and so on. At very low speeds the brushes can follow this type of irregularity but as the speed rises it becomes more and more difficult for them to do so. It is easy to detect if the commutator is not round or is eccentric by making voltage-drop oscillograms of the type sketched in Fig 1. Since the contact area of a brush is nearly always less than the total available area, the brush moves as successive commutator bars

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pass beneath it: hence there arise radial oscillations at a frequency corresponding approximately to the number of commutator bars. Such oscillations can often be detected by their characteristic noise. These small oscillations can be considerably damped by the use of rubber cushions under the brush springs and, of course, it helps if the brushes themselves are not too rigid. Tangential motion of brushes occurs as a result of brush vibration; the mechanism of the action is described. Oscillations of the brush holder also cause tangential motion at frequencies from a few cycles to 5000 c/s. This vibration may be reduced by making the brush gear rigid. A further source of brush motion is the jolting of the locomotive caused by irregularities in the track; in some cases the brush will completely leave the commutator. Brush wear is then considered; when the brush-holders are new, wear is mostly on the height of the brush and is usually small in the absence of current. Sometimes purely mechanical wear can be very heavy,

particularly if there are hard particles in the brushes that can roughen the commutator surface, or if the cooling air is dusty. Electrical wear is usually not so serious as mechanical but it can become so particularly, for example, if the micas between commutator segments are proud. The passage of current increases wear, partly by roughening the commutator surface. The effect of spring loading in reducing wear by improving electrical contact and then increasing it by increasing mechanical wear is described. The wear of brushes in worn brush holders is then considered. If the clearances between the brush holder and the brush are too great the brush can judder and become worn by contact with the corners of the brush holder, as sketched in Fig 4. Tests made on traction motor brush holders show that the current distribution varies over quite a wide range; Table 1 records the amount of current that passes through the springs, through the current leads and through the brush holder in different cases. It is shown that in some cases 40% of the total

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current passes through the brush side into the brush holder. This can be associated with heavy wear of the type photographed in Fig 5. Further data on brush wear is given in Table 2. If the brush holders are not in the right place the type of wear shown photographically in Fig 6 occurs: it was found at the Belova Depot of the Tomsk Railway that in three cases out of ten the brushes had to be changed because of wear resulting from the brush holder being in the wrong position. The influence of atmospheric conditions is considered and it is noted that the brushes work much worse during cold Siberian winters than in summer. This is partly because adhesion to the rails is not so good in winter, causing wheel slip accompanied by heavy currents in the motors. Moreover, the track itself becomes more rigid and causes more vibration; also the material of the brushes themselves, when very cold, becomes more brittle and loses its elasticity. In addition, the negative

 temperature-coefficient of resistance of the brushes

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can cause their resistance to be very high when cold. Finally, dust and gases carried on to the brush-gear by the cooling air can increase wear. In traction motors it is a considerable help to use double brushes, that is two brushes, not insulated from one another, fore and aft in the same brush holder. Double brushes maintain better contact when the commutator is not truly cylindrical. Tests with double brushes grade EG-2a showed that after 45,000 kilometers running the mean wear of the brushes of one motor was 9 to 10 mm with good brush contact surface. The weak spot was the metal fitting of the brush. Details of the test results are given in Table 3. Commutation was found to be much better with the double brushes and it is recommended that they should be more widely used on

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traction motors. There are 6 figures, 3 tables and 4 Soviet references.

SUBMITTED: 12th May 1958

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TRUSHKOV, A. M., kand. tekhn. nauk, dotsent; PARAMZIN, V. P., inzh.

Transient operation of the electric transmission system of the TE-3 diesel locomotive. Trudy OMIIT 37:138-145 '62. (MIRA 17:5)

KARASEV, M. F., doktor tekhn. nauk, prof.; TRUSHKOV, A. M., kand. tekhn. nauk, dotsent; PARAMZIN, V. P., inzh.

Commutation of the traction motors of a diesel locomotive in nonsteady operation and methods for studying it. Trudy OMIIT 37:49-56 '62.

Causes of unsatisfactory commutation in the main generators of diesel locomotives. Ibid.:57-64. (MIRA 17:5)

TRUSHKOV, A. M., kand tekh nauk dotsent; SOLONENKO, G.I., inzh.

Commutation tests of an eight-axle electric locomotive with regulated characteristics. Trudy OMIIT 37:65-74 '62.
(MIRA 17:5)

SHISHKOV, A.A., Cand Tech Sci -- (diss) "[illegible] of traction electrical machines," Tomsk, 1960, 11 pp (Tomsk Polytechnical Institute im S. M. Kirov) (KL, 36-60, 116)

TRUSHKOV, A.N., inzh. (Tomsk)

Problem of testing electric brushes. Elektrichestvo no.4:84 Ap '61. (MIRA 14:8)
(Brushes, Electric—Testing)

TRUSHKOV, ANATOLIY MIKHAYLOVICH, assistent

Problem concerning the nature of sparking in electric machinery. Izv. vys. ucheb. zav.; elektromekh. 4 no.7:84-86 '61. (MIRA 14:7)

1. Kafedra elektricheskikh mashin Tomskogo elektromekhanicheskogo instituta inzhenerov zheleznodorozhnogo transporta.
(Electric machinery)

AUTHOR: Trushkov, A.M., Engineer (Tomsk) SOV/105-58-10-19/28

TITLE: Investigation of Sparking in Traction Motors by Means of Photoelectric Indicators (Issledovaniye iskreniya tyagovykh dvigateley fotoelektricheskim indikatorom)

PERIODICAL: Elektrichestvo, 1958, Nr 10, pp 80-81 (USSR)

ABSTRACT: This paper covers an attempt to use photoelectric indicators of the type FI-1 in the study of the commutation in traction motors of electric locomotives. The tests were carried out at the Novocherkasskiy elektrovozostroitel'nyy zavod (Novocherkassk Electric Locomotives Construction Works) and on the electrified railway line Belovo - Novokuznetsk of the Tomsk Railroad. The device, which is sensitive to sparks in the visible range of the spectrum, was produced in the Tomskiy filial nauchno-issledovatel'skogo instituta elektrotekhnicheskoy promyshlennosti (Tomsk Branch of the Scientific Research Institute of Electrical Industry). It differed from similar apparatus by having another averaging and amplification circuit and a special mechanism for aiming at the center of spark formation (Ref 1). The commutation test runs were carried out by the dollaborators of the Chair of Electric Machines at the Tomskiy elektromekhanicheskiy institut inzhenerov zheleznodorozhnogo trans-

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porta (Tomsk Institute of Electromechanics for Railroad Transportation Engineers) under the supervision of M.F. Karasev, Professor, Doctor of Technical Sciences. Figure 1 shows calibration curves for the photoelectric indicators, figures 2 and 3 give oscillographic results. As a conclusion it is stated that the application of photoelectric indicators offers means of estimating the spark formation in traction motors much more accurately than by customary methods which are based on a visual estimation of spark formation. There are 3 figures and 4 references, which are Soviet.

SUBMITTED: February 10, 1958

TRUSHKOV, A.M., inzh.

Method of estimating brush sparking in traction engines. Elek. i tepl. tiaga no.6:34-35 Je '58. (MIRA 11:6)
(Brushes, Electric) (Electric locomotives)

KUCHUMOV, Aleksey Petrovich, kand.tekhn.nauk, dotsent; TRUSHKOV, Anatoliy Mikhaylovich, assistent

Effect of the disruption of the even surface of a collector on the operation of the brush contact. Izv.vys.ucheb.zav.; elektromekh. 5 no.1:101-104 '62. (MIRA 15:2)

1. Kafedra elektricheskikh mashin Tomskogo elektromekhanicheskogo instituta inzhenerov zheleznodorzhnogo transporta.
(Electric machinery)

FALEYEV, V.A.; TRUSHKOV, A.M.

Effect of the temperature of the collector on the commutation of electric machines. Trudy TEIIZHT 35:52-61 '62. (MIRA 16:8)
(Commutation (Electricity)) (Electric machinery)

TRUSHKOV, A.M.

Effect of eccentricity on the operation of a brush contact. Trudy TEIIZHT 35:62-68 '62. (MIRA 16:8)
(Brushes, Electric) (Electric machinery)

ALIKIN, R.I.; TRUSHKOV, A.M.; SIN'KOV, N.A.

Study of the magnetic system of the DPE-400 traction motor. Trudy TEIIZHT 35:69-76 '62. (MIRA 16:8)
(Electric railway motors) (Magnetic circuits)

ASTRAKHANTSEV, G.V.; TRUSHKOV, G.S.

Determining the position of the borehole in relation to the mine.
Gor.zhur. no.4:54 Ap '55. (MLRA 8:7)
(Prospecting--Geophysical methods)

VIGDOROVICH, D.A.; TRUSHKOV, Yu.N.

Boring in prospecting for placer deposits. Trudy VITR no.3:95-106 '61. (MIRA 15:7)

(Boring)
(Placer deposits)

SAFRONOV, N. I.; POLIKARPOCHKIN, V. V.; TRUSHKOV, Yu. N.

Combined of prospecting for gold deposits. Sov. geol. 3 no.4:92-110 Ap '60. (MIRA 13:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki.
(Gold ores) (Prospecting)

TRUSHKOV, Yu.M.

Principles for calculating effective spacing of boreholes in prospecting for placers. Trudy VITR no.1:109-128 '58.
(MIRA 12:1)

(Prospecting)

TRUSHKOV, Yu. N.

"Principles of a Rational Pattern for Selecting Test Pits in Placer Exploration"

(New Developments in the Methods and Techniques of Geological Exploration) Leningrad, Gostoptekhizdat, 1958. 423 p. (Series: Its: Sbornik trudov I)

BLIZNICHENKO, S.I.; GURARI, F.G.; DOLININA, T.V.; TRUSHKOVA, L.Ya.

Characteristics of the Lokosovo series in the middle Ob' Valley. Trudy SNIIGGIMS no.26:62-76 '62. (MIRA 16:3)
(Ob' Valley--Petroleum geology) (Ob' Valley--Gas, Natural--Geology)

Country : USSR F
Category : Microbiology-Microbes Pathogenic for Man and Animal

Abs. Jour : Ref Zhur - Biol., No.19, 1958, 86100

Author : Yershova, Ye.I.; Trushkova, M.B.
Institut. : Kirov Agricultural Institute
Title : Resistance of Streptococci Isolated from Myoglobulinuric Horses to Physical and Chemical Factors in the External Environment
Orig Pub. : Tr. Kirovskogo S.-Kh. In-ta, 1957, Vol.12, No.24, 165-168
Abstract : no abstract

Card: 1/1

5(3)
AUTHORS: Sheremeteva, T. V., Trushkova, T. A. SOV/20-122-5-22/56

TITLE: A New Technique of Production of the N-Methylimide of Citraconic Acid (Novyy method polucheniya N-metilimida tsitrakonovoy kisloty)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 5, pp 828-830 (USSR)

ABSTRACT: As the first author has proved (Ref 1), alkylimides of citraconic acid, which so far have not been described, can be produced in a way analogous to the synthesis of the alkylimides of maleic acid (Ref 2). A pattern is given. As the temperature of dehydration of 160-200° (see Ref 2) leads to a considerable resinification and to a low (40 %) yield of alkyl-citraconimides (i. e. 24-32 % of the citraconic anhydride), the authors have reduced the temperature of reaction to 130-140°. This increased the yield of imides up to 50-75 % of the amount of amino acid, i. e. 37-50 % of the anhydride, and resinification was reduced. The latter was explained by the authors as a consequence of isomerization of the alkylimides of citraconic acid, in which corresponding derivatives of the itaconic acid

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came into existence (see pattern). These derivatives are inclined to polymerize, i. e. to resinification; they represent an asymmetric substituted ethylene. Alkaline media favor the isomerization of citraconic acid to itaconic acid (Ref 3) . Such a medium can be created in a partial thermal decomposition in the dehydration of the alkylamide. In order to avoid this, the authors, apart from reducing the temperature of reaction, have conducted experiments aiming at the production of methylamide of citraconic acid by means of the effect of methylamine hydrochloride upon the citraconic anhydride. The reaction was carried out in one single stage without isolating the alkylamino acid (see pattern). The hydrogen ions released in the reaction favored dehydration and created an acid medium of the reaction mixture. By this isomerization was avoided. The yield of n-methylimide of citraconic acid fluctuated between 70 and 80 % of the amount of anhydride. In order to verify the assumption that the acid medium prevents isomerization it was attempted to produce n-methylimide by interaction between methylamine hydrochloride and itaconic anhydride. A yield of 40 % of the amount theoretically possible was obtained; the rest of the

A New Technique of Production of the N-Methylimide of Citraconic Acid SOV/20-122-5-22/56

reaction mixture was resinified. Therefore no n-methylimide of itaconic acid could be isolated. There are 1 table and 3 references, 1 of which is Soviet.

PRESENTED: May 16, 1958, by B. A. Kazanskiy, Academician

SUBMITTED: May 15, 1958

Card 3/3

PURCHEL, D.S.; TRUSHKOVSKAYA, T.K.

Apparatus for obtaining hydrogen and other gases. Khim.v shkole 14 no.4:46-47 Jl-Ag '59. (MIRA 12:11)

1. Tiraspol'skiy pedagogicheskiy institut.
(Chemical apparatus) (Gases)

TRUSHKOVSKIY, A. A.

Cand Geog Sci - (diss) "Origin of the Tersko-Kumskiye Sands, their soils and vegetation." Moscow, 1961. 28 pp; 1 p of tables; (Moscow Order of Lenin and Order of Labor Red Banner State Univ imeni M. V. Lomonosov); 200 copies; price not given;(KL, 6-61 sup, 201)

GAEL', A.G.; DOSKACH, A.G.; TROSHKOVSKIY, A.A.

Dust storms in March and April 1960. Izv. AN SSSR. Ser. geog. no.1: 57-67 Ja-F '61. (MIRA 14:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova, Biologicheskiy fakul'tet i Institut geografii AN SSSR.
(Russia, Southern—Dust storms)

GAYEL', A.G.; TRUSHKOVSKIY, A.A.

Deflation phases and the age of soils on the aeolian sands in the steppe zone of the U.S.S.R. Vest. Mosk. un. Ser. 5: Geog. 17 no.6:24-31 N-D '62. (MIRA 16:1)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta i Institut geografii AN SSSR.
(Sand dunes) (Soil formation)

TRUSHKOVSKIY, A.A.

Stages in the overgrowing of the Terek-Kuma sands. Bot.zhur. 44 no.5:678-681 My '59. (MIRA 12:11)

1. Institut lesa AN SSSR, selo Usmanskoye, Moskovskoy oblasti.
(Terek Valley--Plant succession) (Kuma Valley--Plant succession)

TRUSHKOVSKIY, A.A.

History of the formation of Terek-Kuma interfluve sands and some features of the development of vegetation on them [with summary in English]. Bot.zhur. 43 no.10:1418-1433 O '58. (MIRA 11:11)

1. Institut lesa AN SSSR, selo Uspenskoye Moskovskoy oblasti. (Terek Valley--Sand) (Kuma Valley--Sand) (Botany--Ecology)

1. TRUSHKOVSKIY, A.A.

2. USSR (600)

4. Desert Flora

7. Sandy areas of Trans-Volga as potential grazing land and an appraisal of natural propagation of vegetation on the sands. Bot. zhur. 37 no. 6. 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

1. TRUSHKOVSKIY, A. A.

2. USSR (600)

4. Pastures

7. Sandy area of Trans-Volga as potential grazing land and an appraisal of natural propagation of vegetation on the sands. Bot. zhur., 37 no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

GAYEL', A.G.; TRUSHKOVSKIY, A.A.

Age and the classification of soils in the aeolian sands of the steppe zone. Izv. AN SSSR. Ser. geog. no.4:28-42 Jl-Ag '62. (MIRA 16:5)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova i Institut geografii AN SSSR.
(Sand dunes) (Geological time) (Steppes)

1. TRUSHLEVICH, I. V.

2. USSR (600)

4. Coal

7. Determining the exact duration of efficient flotation of coal sludge on the basis of a study of kinetics of flotation of petrographically different kinds of coal, Ugol' 28, no. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Unclassified.

TRUSHLEVICH, I V

981. DETERMINATION OF TIME REQUIRED FOR FLOTATION OF COAL SLURRIES BY STUDY OF KINETICS OF FLOATABILITY OF PETROGRAPHIC VARIETIES OF COAL. Trushlevich, I.V. (Ugol (Coal), Feb. 1953, 11-13). Methods proposed are the examination of slurries in a microscope (preferably binocular) in reflected light and the construction of curves to show the petrographic constitution of flotation products obtained after different periods of flotation. (L).

TRUSHLEVICH, I.V.

Fixing the flotation time of coal slimes more accurately based on the study of the kinetics of flotability of petrographic varieties of coal. Ugol' 28, No.2,11-13 '53. (MLRA 6:2)
(CA 47 no.13:6631 '53)

11(7) PHASE I BOOK EXPLOITATION SOV/2174

Oglobin, Nikolay Dmitriyevich, and Igor' Viktorovich Trushlevich

Tekhnicheskiy kontrol' na ugleobogatitel'nykh fabrikakh (Technical Control in Coal Preparation Plants) Moscow, Ugletekhizdat, 1959. 210 p. Errata slip inserted. 4,000 copies printed.

Resp. Ed.: K. A. Korovenkova.

PURPOSE: This textbook is intended for students in mining schools and institutes. It may also serve as a manual for the technical control of personnel of coal preparation plants.

COVERAGE: This textbook describes the operation of a modern coal preparation plant with its mechanical equipment and procedures used to improve the quality of run-of-mine coal. In addition to general information on coal preparation, the authors describe in detail coal sampling, crushing, screening, dedusting, dewatering, drying, weighing, etc. They set forth the scientific

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principles upon which these operations are based. The equipment used in coal preparation is also described and illustrated. Individual chapters are devoted to the technical control of operations, analysis of the quality of run-of-mine coal and of the products of its preparation. The organization of work in a coal preparation plant and its accounting and record keeping procedures were discussed, and a number of suggestions made. Chapters I - III are written by I. V. Trushlevich, and Chapters IV - X by N. D. Ogloblin. The book contains 96 figures and 52 tables. There are 17 references, all Soviet.

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